## AMENDED IN SENATE MAY 3, 2005 AMENDED IN SENATE APRIL 4, 2005

## SENATE BILL

No. 441

## **Introduced by Senator Soto**

February 17, 2005

An act to add Section 739.11 to the Public Utilities Code, relating to electricity.

## LEGISLATIVE COUNSEL'S DIGEST

SB 441, as amended, Soto. Electricity: rates: advanced metering infrastructure.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. Existing law authorizes the commission to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable. Existing law requires electrical corporations furnishing electricity to an agricultural producer to prepare and file tariffs providing for optional off-peak demand service, including the availability of time-differentiating meters or other measurement devices.

This bill would, with certain exceptions, prohibit the commission from—authorizing or requiring the installation of advanced metering infrastructure, as defined, for—a residential or small commercial eustomer of an electrical corporation any building constructed prior to January 1, 2006 and occupied by a customer with average annual electricity usage of less than 1,000 kilowatthours per month—and occupying a building that was constructed prior to January 1, 2005, unless certain findings are made by the commission based upon evidence presented at a public hearing. The bill would authorize an electrical corporation to recover the expenses for advanced metering

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infrastructure for residential and small commercial customers, only if, and to the extent that, those expenses are offset by equal or greater cost reductions that are passed through in rates to consumers as a result of the use of advanced metering infrastructure. The bill would, with certain exceptions, prohibit specified residential or small commercial customers of an electrical corporation with average monthly usage of less than 1,000 kilowatthours occupying a building constructed prior to January 1, 2006, from being placed on a default time-differentiated rate schedule or other rate schedule using advanced metering infrastructure, without the customer's affirmative written consent.

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime.

Because the provisions of this bill would be a part of the act and a violation of any of those provisions would be a crime, the bill would impose a state-mandated local program by creating a new crime.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

*The people of the State of California do enact as follows:* 

- 1 SECTION 1. The Legislature finds and declares all of the 2
- following: 3 (a) The Public Utilities Commission is currently considering
- 4 authorizing or requiring electrical corporations to install
- advanced metering infrastructure (AMI) for their customers,
- including all existing residential and small commercial
- 7 customers, regardless of their size or location. One electrical
- corporation has requested authority to spend fifty million dollars
- (\$50,000,000) in 2005 in order to prepare to start AMI meter 10 installations in early 2006.
- 11 (b) AMI includes the installation of interval data recording
- 12 meters as well as two-way communications equipment. AMI
- technology requires more advanced and costly equipment than

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the equipment necessary to provide time of use billing, to conduct automated meter reading, or to provide direct load control of customer equipment.

- (e) The replacement or retrofit of millions of small customers' meters statewide with AMI will cost billions of dollars, which electrical corporations will seek to recover in rates. The investment in communications equipment may become stranded if electrical corporations decide to deploy broadband over power lines at a later date.
- (d) The commission has not conducted any evidentiary hearings to determine whether universal deployment of AMI for small customers will be cost effective for ratepayers. The elaimed benefits of AMI include operational benefits, including outage detection and reduced meter reading costs, as well as reduced costs of generation due to the shifting of peak load periods. The claimed operational benefits alone have not been sufficient to justify the costs of AMI, and may be achievable through cheaper technologies. Further, residential peak load reductions may be achievable in a more cost-effective and reliable manner through direct load control programs, appliance efficiency standards, and conservation measures. The commission has not examined these alternatives in an evidentiary hearing.
- (e) The results of the statewide pricing pilot program in 2003 and 2004, show that California residential customers have the lowest price responsiveness of any reported in the literature, and lower than existed in California 25 years ago. This result is consistent with the fact that California residential customers use only about 61 percent of the national average for residential electricity consumption, and only residents in hot climate zones with significant air conditioner use can shift substantial electricity usage in response to higher prices during hot summer afternoon hours of peak electricity usage.
- (f) The commission should not authorize or require the installation of AMI on existing buildings occupied by residential or small commercial customers with an annual average usage of less than 1,000 kilowatthours per month unless it first finds, based on clear and convincing evidence, that the installation of AMI will result in average electricity or generation rates for the

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residential and small commercial classes that are lower than they otherwise would have been absent the installation of AMI.

- (g) No small customer occupying a building that was constructed prior to January 1, 2005, should be placed on a default time-differentiated rate schedule without the customer's informed written consent.
- SEC. 2. Section 739.11 is added to the Public Utilities Code, to read:
- 739.11. (a) Except as provided in Sections 393 and 353.3, the commission shall not authorize or require the installation of advanced metering infrastructure for buildings constructed prior to January 1, 2005, and occupied by residential or small commercial customers with annual average usage of less than 1,000 kilowatthours per month, unless it first finds, based upon clear and convincing evidence, all of the following:
- (1) The installation of advanced metering infrastructure will, over the following five-year periods, result in average electricity or generation rates for residential and small commercial customer elasses that are lower than they would be without the installation of advanced metering infrastructure.
- (2) The deployment of advanced metering infrastructure will result in more cost-effective peak load reduction than other alternatives, including air conditioner cycling programs and appliance efficiency standards.
- (3) The communications technology proposed to be used in providing advanced metering infrastructure is the most cost-effective alternative in comparison with other technologies, including broadband over power lines.
- (4) A program of universal deployment of advanced metering infrastructure throughout an entire service territory of an electrical corporation is more cost effective than partial deployment in selected climate zones.
- (b) Expenses for owning, installing, or maintaining advanced metering infrastructure for residential and small commercial customers may only be included in the rates of an electrical corporation if, and to the extent that, those expenses are offset by equal or greater cost reductions that are passed through in rates to consumers as a result of the use of advanced metering infrastructure.

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(e) Except for customers participating in a pilot program authorized by Section 393 and customers with distributed energy resources that participate in a real-time metering and pricing program pursuant to Section 353.3, no residential or small commercial customer of an electrical corporation with an average annual usage of less than 1,000 kilowatthours per month and occupying a building that was constructed prior to January 1, 2005, shall be placed on a default time-differentiated rate schedule without that customer's affirmative written consent

- (b) Electrical corporations have already requested over one hundred and twenty million dollars (\$120,000,000) to spend in 2005 in order to prepare to install AMI in early 2006.
- (c) The entire statewide cost of AMI installation is estimated at several billion dollars.
- (d) The commission has not conducted any evidentiary hearings to determine whether universal installation of AMI for small customers will be cost-effective for those customers.
- SEC. 2. Section 739.11 is added to the Public Utilities Code, to read:
- 739.11. (a) For purposes of this section, "advanced metering infrastructure" means interval data recording meters, along with two-way communications and any other equipment necessary for the installation and operation of the meters.
- (b) Except as provided in Sections 353.3 and 393, the commission shall not require the installation of advanced metering infrastructure for any building constructed prior to January 1, 2006 and occupied by a customer with annual average usage of less than 1,000 kilowatthours per month, unless it first finds, after a public hearing, based upon the evidence presented at the public hearing, that the installation of advanced metering infrastructure will save each customer class more than it will cost.
- (c) Except as provided in Sections 353.3 and 393, no customer of an electrical corporation with average annual usage of less than 1,000 kilowatthours per month and occupying a building constructed prior to January 1, 2006, shall be placed on a default time-differentiated rate schedule or other rate schedule using advanced metering infrastructure, without the customer's affirmative consent obtained in writing.

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SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIIIB of the California Constitution.